Sean’s Tutorial

Fog and backdrop effects
Setting up the Scene

- First I set up a simple scene so you can see clearly the effects of the fog. Of course you will already have a scene to use, but for demonstration purposes I used Lightwave default objects and some simple terrain I quickly created.
Ninja are Cool!!!

- Here is a picture of the object I picked along with the terrain in modeler.
Before

- This is what the scene looks like set up.....

- Notice the Added Diamond, you will see in a moment why I added this.
First, go to the Effects window. To get here (Lightwave Ver. 8) window>backdrop Options. The backdrop tab should be selected.
Textured Environment

- This is the part of the backdrop that will simulate cloud cover. It will also be used to simulate the ground fog later.
- Select add environment>Textured environment...
Environment Properties

- Once the new environment is added you should then right-click on it, and select properties.
Add Texture

- Once you have the properties open, left-click the textures button on the lower portion of the window
Once in this screen we will need to add the type of layer that will best simulate clouds...a procedural layer. You will want to play with the settings to get the look you want. Here are the settings I used.
The Turbulence procedural simulated the cloud cover I was looking for.

The color setting will be the base of the procedural.

The frequencies determine the level of intricacy of the procedural.

The contrast controls how rapid the separation between the high and low points of the texture.

The small power increases the detail of the falloff regions.
Once we are done with the procedural, we will need to add the type of layer that will best distinguish cloud color...a gradient layer.

This new layer will default as a previous layer adjustment, enhancing the layer below it.
Texture Editor (Gradient)

- In the gradient bar you will see a slider at the top. From one slider to the next the bar will slowly and smoothly change to the properties set for that bar, including color and opacity.
- The sliders work by clicking in an open spot to create a new slider. With the controls to the right you can adjust the selected slider.
- I suggest making a few sliders and adjusting the properties to get a feel for how they effect your procedural layer.
- The alpha sets the transparency of the slider.
I decided to put holes in my gradient for a more realistic fog....(but I thought we were making clouds) TRUE! But this same layer is used when rendering the ground fog.

This is how my Gradient ended up.
Here is a shot of the sky, I use it to make sure the clouds are coming out how I had hoped.
Basic Fog

- The first item in this tab you will want to play with is the FOG type. I think nonlinear1 looks the best in the scene I have created here. This simply determines how the fog will roll in with distance.
- The next settings control the distance of the fog. Min distance is where the fog starts to show, and the max is where the fog is at its thickest.
- The Min amount controls the density of the fog at the min distance, and the max amount controls the density at the max distance.
- The next item down is the fog color and the backdrop color check box... if you want the look of your sky blending in with your scene, the backdrop will achieve this, HOWEVER, it can look cheap and make your scene appear transparent if done incorrectly
- For my scene I decided to use the color selector and make a Grey fog
Ground Fog

- From the same volumetrics tab, in a similar fashion to how we added the textured environment, select add volumetric>ground fog.
- Then right-click on the newly added volumetric and select properties.
Ground Fog Options

- I suggest staying with fast fog, from my experience it’s not really worth changing.
- The top is how far up the ground fog will appear from 0 on the Y axis. And down is how low it will appear.
- Falloff controls how it will fade away.
- Nominal distance controls how close it appears or travels.
- Luminosity and opacity work just as in textures, but apply to the fog.
- I selected the “Use Backdrop Color.” This, if you have alpha set, will make your fog appear patchy and irregular.
- Play with these settings to see how they work in your scene.
Glow - Reason for the diamond

- If in your scene you have illuminated objects such as lanterns, candles, lamps, etc. it may be a good idea to cast a halo around the light source. This is a cheap way to add volumetric lighting that does not interfere with other filters.
- Simply check the Enable glow and set the parameters.
- Again play with these settings to get a feel for what you want.
- Too much glow can make your object look blurry or washed out, and too little will have no effect. For fog I recommend low intensity with a larger radius.
Glow isn’t working?

- For Glow to work you have to set the surface of the object to work with it as well. This allows you to single out what you want to glow in your scene.
- To do this, open surface editor and select the surface you want to glow, then click the advanced tab.
- Here you will see the second option of “Glow Intensity”
- Like all things Lightwave, play with this until you get a feel for how it works....
- Remember that diffusion and luminosity can have significant effect on the glow properties, because glow gets its power and how light affects the object from the light source.
Recap With Renders

- Scene without effects.
Recap With Renders

- Scene with Backdrop but no gradient.
Recap With Renders

- Scene with backdrop and gradient.
Recap With Renders

- Scene with backdrop and fog.
Recap With Renders

- Scene with Backdrop, fog, and ground fog.
Recap With Renders

- Scene Finished.
This was a tutorial, and more time spent on fog, will make it look that much more real.

Keep in mind that subtlety is the key to a realistic scene, don’t overdo it.

Fog can help mask “less than perfect” texturing.

No amount of fog will help poor composition, so think carefully when setting up your camera shots.

Viper helps a lot when first getting the feel for how the adjustments work.

Ninjas are cool!
I really didn’t look up anything to help me learn about this. I just went in and started playing. Using the tools is the best way to learn them.

Various discussions with the teacher and other students.